New York State
Congressional Testimony
December 5, 2001

Good Morning, Senator Wyden and members of the Committee. On behalf of Governor George E. Pataki, I am honored to represent New York State to discuss the role of technology in responding to the events of September 11.

The tragic events of that day have forever changed the things that we understood to be absolute truths on September 10. There will be–and must be–much change as we move into this new, uncharted world.

Never before has the ability to communicate, gather intelligence, and protect public safety been as heightened as it is now and technology will be the focus of many of these efforts. Technology played an important role in responding to the terrorist attack of September 11.

- Geographic Information Systems (GIS) to obtain sophisticated, detailed imagery of the disaster site;
- Databases for tracking financial donations and supplies; and
- Use of the Internet as a communication tool.

Many agencies and individuals came together in solidarity to join in the rescue operation.

We have a tremendous opportunity now to critically examine our emergency response capabilities, not only in New York, but across the nation, and across jurisdictions. We need to examine the policies, procedures, and priorities that currently exist within our information technology infrastructure and, using some of the lessons learned from September 11, assess where we need to go from here. By learning the lessons from the past and working and training together for future responses, we can better prepare to meet the challenges that will face us all in this new era. Our efforts are focused on four phases: Protection, Detection, Response and Recovery.

I'd like to take this opportunity to discuss some of our response efforts in New York State, and illustrate some of our lessons learned. I'm prepared to address what some of the communications issues were, and what we've learned from this.

What Happened

Moments after the attack, Governor Pataki activated the State's emergency management operations center (SEMO), under the direction of James Natoli, Director of

State Operations. Twenty-plus agencies responded to SEMO and operated on a 24 x 7 basis.

The Governor activated the statewide Mobilization and Mutual Aid Plan making available to New York City all State resources of the fire services of the State of New York. The Governor's Capital Region Urban Search and Rescue Team was also activated and remained active for 16 days in assisting in recovery. The Insurance Emergency Operations Center (IEOC) was also activated. By the following day, executives from the largest writers of personal and commercial lines insurance in the NYC area were assembled and working from the IEOC. A satellite video link between the IEOC and the State Emergency Management Office was created to enhance communications. Immediately real time information was exchanged with SEMO, the insurance industry, the press as well as consumers. A dedicated toll-free hot line was activated for consumers to call for information relating to insurance.

A temporary adjuster permit application process was utilized. This allowed insurers to apply for temporary adjuster permits over the Internet instead of completing paper applications. Almost 400 permits were issued.

Other security issues were addressed off-site, including the monitoring the State's data center and networks. State Police were immediately dispatched to secure the data center locations; security was heightened for all State office buildings.

A 24 x 7 emergency call center was activated within one hour, staffed with 150 operators. Over 187,000 calls were logged from businesses and citizens offering to volunteer or donate goods and services. At our peak, we were answering over 27,000 calls per day. All information was recorded in a database that was used by SEMO officials to deploy resources.

New York worked to quickly assess the technology impact, determining that some 2250 data circuits were out, affecting 40 agencies; connectivity to NYC was lost, and many critical applications were down.

Because of our prior planning for Y2K, State and city agencies had contingency plans in place that enabled them to respond to the loss of key telecommunications lines. We were able to implement alternate emergency procedures, ensuring that critical human service programs continued.

We prioritized the 2250 circuits into a list of approximately 500 priorities, based on public safety and human services, and subsequently added another 100 circuits to the list based on their impact, such as Banking and Tax operations. We worked closely with the

impacted agencies and our business partners to address the situation. In some cases, we were able to provide the agencies with alternative solutions via our Statewide network or other providers.

The Tax Department's NYC Office was located in the World Trade Center. In addition to the terrible loss of life, we lost our business records - case records that were painstakingly developed as part of our audit program. The potential loss related to audit recoveries that have been lost or deferred has not been calculated. We lost all our desktops and servers. A lesson from this experience is that while we, like most organizations, are diligent in regards to backup and off-site storage of our mainframe data, we must carefully assess the extent that our business records are maintained on servers and desktops, where we may not be as diligent in our backup and recovery procedures. Do we have the ability to recover our business records in the event that the site is destroyed?

The NYC Downtown Hospital, one of the major staging areas for victims, lost communications. Cell phones and runners were the only forms of communications available. This highlights the need for backup or redundant communications systems.

The outpouring of support in the hours and days following the attacks was tremendous. However, we quickly realized that we had to devise a system to capture the data on the donations of finances and supplies. By September 13th, we had an operational web-based database application for collection of this information. We received over 50,000 offers from businesses and citizens donating goods and services:

- IBM provided PDAs, desktop computer, services to a variety of organizations; and also provided office space to relocate State agencies' operations;
- Microsoft has donated $10 million in funding and resources to assist with the World Trade Center disaster response efforts;
- AOL Time Warner hosted the donation website; and
- JP Morgan Chase provided free banking services to assist in the World Trade Center Relief Fund.

And the list goes on and on... ranging from medical supplies and offers of medical services to recovery equipment.

A critical component in New York State's response efforts was the use of Geographic Information Systems, commonly known as GIS. Using GIS, we were able to collect detailed imagery that proved vital to the fire department and other emergency responders. Using thermal imagery, we were able to determine where the "hot spots"

were, and the location and progression of underground fires. This imagery was overlayed by gas pipe line data to provide crucial information about the location of fires relative to gas lines. This data was used by the NY Fire Department in deploying their resources. We contracted with EarthData, a firm out of Maryland, for daily-flyovers of the disaster site, and processed that raw data into usable imagery within 8 hours– a process that would normally have taken weeks.

Security Has Been A Number One Priority of Governor Pataki Prior to the Date Change (Y2K)

Governor Pataki, has long been active in ensuring that appropriate response mechanisms are in place in the event of a disaster–whether it be natural or otherwise. He made information security a priority during Y2K. In this regard, Governor Pataki placed a priority on the activities of the State Disaster Preparedness Commission, issued an Executive Order establishing a Commission on Terrorism and most recently established the Office of Public Security.

The Office of Public Security, under the leadership of James Kallstrom, was created to to ensure central coordination of all state activities related to public security. These activities have proven critical in our ability to respond to September 11 and for any future event that may occur.

As we move forward, the technology areas that we are focusing are: enhancing security, GIS technology, deploying wireless technology, and enacting enabling legislation that will secure the legal framework for these initiatives. These are recommendations that apply to NYS and the nation as a whole. Our success can be best assured by careful coordination with the federal government as well as the private sector.

Enhancing Security:

Physical Security. New York is establishing a statewide critical infrastructure workgroup, that will be responsible for gathering detailed information about the state's critical infrastructure, and developing strategies for protecting it, including scenario simulation exercises.

Information Security: We are addressing this on a number of fronts. In early 2000, the Governor established the State's first statewide information security office to provide a coordinated, comprehensive approach to developing policies and procedures to protect the State's critical technology infrastructures, such as networks and data centers. The Governor required every agency to have an information security officer.

In addition, the Office for Technology is enhancing the State's intrusion detection and vulnerability scanning abilities. The Office is looking to use its successful collaborative agreement model used in our GIS data sharing cooperative to establish cooperative Security partnerships within State agencies, and other entities. Currently, we are sharing information with 60 State agencies and five other states.

We have drafted legislation that will further enhance information security, and protect the confidentiality of information regarding known vulnerabilities.

Information Security is the number one priority for the Governor's Office for Technology. It is imperative that we employ the proper methods and procedures to protect, detect, respond and recover from attempts to compromise the integrity of critical infrastructures. The Office for Technology works closely with the new Office of Public Security in recommending technology strategies in protecting the State's critical infrastructure and in researching and recommending technologies that can improve physical security for the State.

The Office provides the overall information security policy, direction and training to State agencies' Information Security Officers. It also provides:

- Security Training;
- Statewide Security Policy & Procedures; and
- Security Incident Handling
- Annual Security Conference for State and local government;

<u>Enhancing GIS</u>

- One Agency w/GIS Expertise is given "Lead Responsibility" for GIS during emergency activations.
  - ? Management of GIS services at the emergency operations center.
  - ? Management of a mobile on-site GIS unit.
  - ? Distribution of geospatial data and analyses to all participating agencies.
  - ? Coordination of GIS resources available from other agencies.
  - ? Contracting for additional geospatial resources as needed.

- Getting Relevant Geospatial Information to Field Staff & back.
  - ? Effective contact with emergency response personnel in the field is critical both to ensure that GIS products and services are available to those in need and to ensure their needs are accurately identified. It is also critical to

insuring accurate information from the field is brought back to key decision makers at the emergency management operations center. Locating a mobile GIS unit as close to the emergency site as possible is vital. GIS staff must not only provide geospatial information, but also educate on-site emergency personnel on how it can assist them.

Recommended Action Items:

- Identify primary GIS contacts for each agency involved in the emergency response (including 24 hour contact work, home and mobile phones & e-mail addresses), their responsibilities, and the data that their agency can provide.

- Maintain GIS space, hardware, and software capabilities at the emergency operations center.

- Establish emergency services contracts for aerial imagery data.

- Establish a "mobile mapping & GIS unit" at or near the site of a disaster.

- Review the need for hard copy maps on site both at the emergency operations center and at the emergency site itself.

- Establish procedures for collecting and forwarding geographically referenced data from the site to the Emergency Operations Center.

- Establish local interface/liaison procedures.

New York State has implemented the following:

Created the Office of Public Security, with lead responsibility for developing a comprehensive statewide strategy to secure New York State from acts of terrorism or terrorist threats. The Office will coordinate all State efforts to detect, identify, address, respond to and prevent terrorists acts from occurring within the State.

Assigned one agency (Office for Technology) with lead responsibility for technology:

- Maintain a technology contact list, including up-to-date phone numbers and e-mail addresses;
- Coordinate all applications development, planning and support in preparation for, as well as during an emergency;
- Coordinate information technology security measures, as necessary.

Implement monthly multi-agency meetings to focus on a particular topic and develop a set of defined deliverables:

- Business Continuity;
- Disaster Recovery;
- Physical Security; and
- Information Security.

Communications

- Developing a web template to provide clear and concise information for the public.
- Implementation of Wireless Communications

  We are developing a Statewide Wireless Network. Using state-of-the-art technology, this new radio system will provide both voice and data communication capability. In crisis situations, where seconds count, all responders will be able to instantly communicate with each other.

  Under the new system, New York State will provide the necessary backbone infrastructure for a statewide emergency communications system which localities may join at their option, based on each individual locality's needs. The Statewide Wireless Network is committed to pursing partnership arrangements with government organizations to ensure maximum interoperability, reduce overall costs of the system, and reduce the time necessary for implementation.

  As Mr. Joe Allbaugh, Director of FEMA, testified on October 16, "if there is a single item that we could do, (it) is to make sure that police, fire, emergency responders can communicate with one another. Oftentimes, I go into a community and there are all types of bands and frequencies used and folks, literally, who are responding to an incident can't talk to one another."

  The bravery and courage of our firefighters, police and other emergency responders to the horrific events of September 11th has given special meaning to the word heroes. If we are to protect their lives and safeguard the public we serve, we must provide these and other heroes across the State with the ability to communicate effectively and quickly with each other.

  Because natural and man-made disasters know no bounds.

  We are now living in the world of wireless communications. Our first responders, however, use incompatible and often obsolete radio equipment-- complicating their ability to communicate with each other. In fact, runners are often still used for

communication by first responders in emergencies.

We are also ensuring redundancy and back-up capabilities through our Statewide communications network.

Governor Pataki's philosophy with regard to technology has always been one of collaboration and mutual coordination–developing strong public and private partnerships.

"We can't do it alone; our successes are collective efforts."

In that regard, a proposal to coordinate the local, State, federal and private sector as envisioned in the NetGuard proposal is commendable.

We respectfully suggest that any such coordinated effort bear in mind the first responders are at the local level. Federal and state government need to be in a position to assist and support, not impede these efforts.

Any applications that are developed must be readily accessible by the each State's Emergency Management Office.

We need to build on the foundation that has already been established–and works well–from the local emergency offices, to the state emergency operations center, to the federal emergency office. We must not add more layers that make effective response more difficult.

The Governor would like to offer New York's assistance in providing our resources that are already or will be in place, including our databases for critical infrastructure, donations, and asset management.

By working collaboratively across all levels of government, we can achieve success and provide an even-more significant response.

Thank you for the opportunity to be here this morning.